SAVAGE RIVER STATE FOREST ANNUAL WORK PLAN

FISCAL YEAR 2019



The mark of responsible forestry



Good for you. Good for our forests.*

SFI-00050

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Date

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Savage River State Forest FY-19 Annual Work Plan



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I. State Forest Overview

Savage River State Forest is approximately 55,155 acres in size and is situated in the northeastern quadrant of Garrett County in Western Maryland. It is a second growth mixed hardwood forest dominated by oak species, sugar and red maple, black cherry, hickory and ash. Owing to high rainfall and certain topographic features, Savage River State Forest contains many excellent quality growing sites stocked with superior quality trees. The forest contains approximately 4,000 acres of conifer plantations that were established in the 1940's following state acquisition. Red pine is the dominant tree species within these plantations but other conifers include white pine, Norway spruce, larch, and Scotch pine. These plantations were established as nurse crops to rehabilitate abandoned and depleted farm fields, with the long-term goal of conversion back to native hardwoods as appropriate.

Savage River State Forest has been intensively managed over the last nine decades. Forest harvest and grooming operations are undertaken to thin overstocked stands, to effectively deal with public safety concerns, to harvest mature or diseased/dying trees, to improve habitat for certain wildlife species, to assist and provide for certain research needs, to address aesthetic concerns and to increase the proportion of age/height diversity of forested stands.

II. Annual Work Plan Summary

The FY-2019 Annual Work Plan for Savage River State Forest was formulated in 2017. It contains projects to be undertaken in the areas of Special Projects, Maintenance and Operations, Recreation, Watershed Protection, Ecosystem Restoration / Protection, and Wildlife Management. In addition to the routine operations and management of the State Forest, the FY-19 Annual Work Plan for Savage River State Forest details 16 land management projects that will be the focus of the State Forest management staff for FY-19. All projects and proposals within this Plan have been developed to meet one or more of the Land Management Guidelines and Objectives outlined in the Savage River State Forest Sustainable Management Plan including:

Forest Economy: management activities intended to maintain an economically sustainable forest and contribute to the local economy through providing forest-related employment and products.

Forest Conservation: management activities with a purpose to protect significant or unique natural communities and elements of biological diversity, including Ecologically Significant Areas, High Conservation Value Forests and old growth Forests. Old growth forest management serves to restore and/or enhance old growth forest structure and function.

Water Quality: management activities designed to protect or improve ecological functions in protecting or enhancing water quality.

Wildlife Habitat: management activities with a purpose to maintain and enhance the ecological needs of the diversity of wildlife species and habitat types.

Recreation and Cultural Heritage: management activities with a purpose to maintain and enhance areas that serve as visual, public camping, designated trails, and other high public use areas.

A. Special Management Projects Include:

- 1. Continued Development of the Certified, State Forest Sustainable Forest Management Plan with special focus on addressing items identified as in need of improvement as a result of the 2016 FSC/SFI Certification Audits.
- **2. Forest Stand Delineation, Inventory and Monitoring** Completion of the project to re-inventory and redefine stands on the entire forest. This critical project will continue in FY-19. To date, 100% of the data collection in harvestable stands is completed. Areas of HCVF including wildlands, ecologically significant areas, old growth, old growth ecosystem management areas and areas that preclude timber harvest operations will be inventoried secondarily to the harvestable areas. The project will allow a thorough analysis of this complete data set from which further management plans will be derived. Inventory work will continue in the form of follow-up monitoring protocols associated with the initial inventory and certification requirements.
- **3.** Non-Native Invasive Species (NNIS) Inventory and Control Work The Sustainable Forest Management Plan calls for various responses to NNIS and the Forest Inventory Project has allowed for a broad view of the problem forest wide.

B. Land Management Projects Include:

- **1.** Continuation of the ecosystem restoration project involving control of invasive, exotic plants forest wide.
- **2.** Continuation of the ecosystem restoration efforts involving control of invasive, exotic forest pests, particularly the Hemlock wooly adelgid.
- **3.** 11 Silvicultural projects including:
- 6 Intermediate Harvests on 302 acres; 48 of which include interfering vegetation control.
- 2 Regeneration Harvests on 93 acres.
- 3 Non-commercial interfering vegetation control projects on 141 acres.
- **4.** Six noncommercial silvicultural practices to promote regeneration including:
- *Three projects to control interfering and undesirable tall woody vegetation to promote seedling establishment on 141 acres.
- *Three projects to control interfering and undesirable ferns and grasses to promote seedling establishment on 141 acres.

Forest harvest operations are undertaken to utilize mature and dead/dying/diseased trees; to thin overstocked stands; to improve and diversify wildlife habitat; to effectively correct public safety concerns and issues; to reduce the forests vulnerability to insect attack, disease or wildfire

hazard; to facilitate certain approved research needs; to improve certain aesthetic aspects of an area; and to improve the proportions of age class and species diversity within stands and management blocks. This forest has been intensively managed for over 100 years, utilizing both even and uneven-aged techniques via selective removals and regeneration harvests. Early records indicate that as cut over land was acquired, foresters culled the forest, removing the poorly formed and damaged timber left behind in the wake of the cut and run practices employed by early timber speculators. By removing these undesirable trees, newly forming seedlings were released from competition and were thus cultured into the future growing stock of trees that we enjoy today. The benefits of this work have been significant including improved wildlife habitat diversity, improved forest health and more abundant mast production, improved utilization of gypsy moth damaged trees, reduced forest fire hazard, and the considerable financial contribution of management to the state and local economies as well as to those employed in the forest products industry.

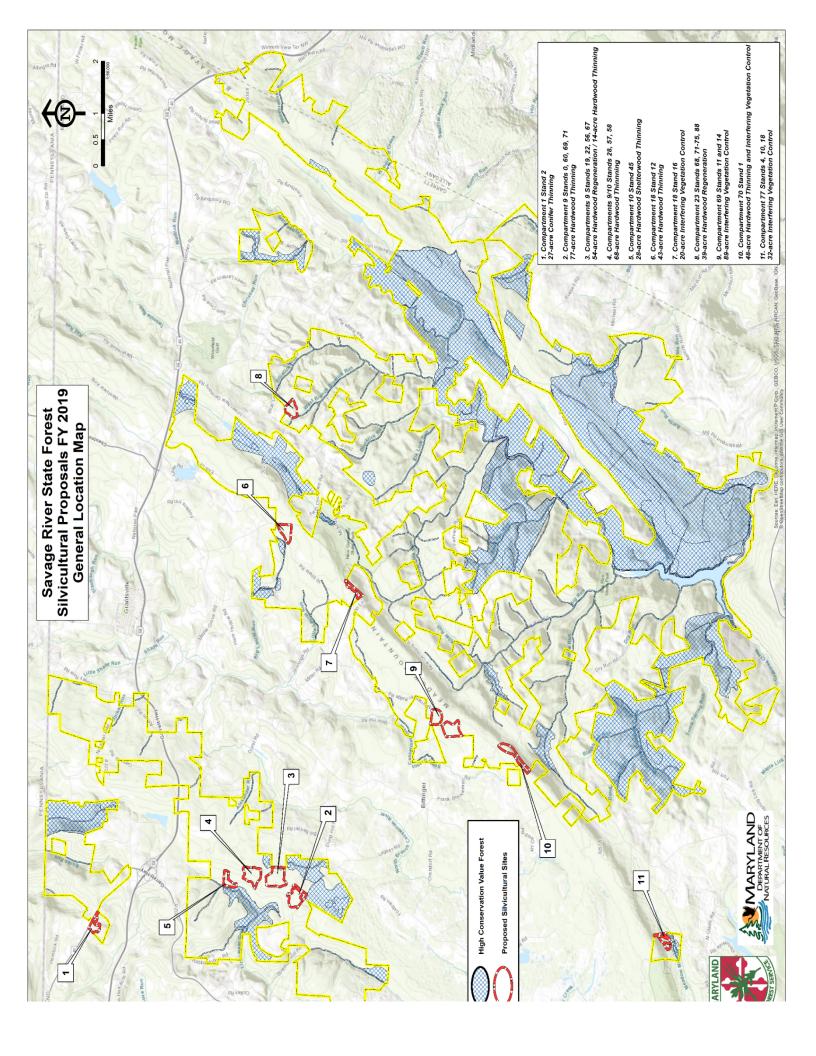
The FY-19 Annual Work Plan outlines eight harvests on 395 acres, producing a harvest of approximately 1,200,000 board feet of sawtimber and accounting for an estimated \$250,000 worth of raw wood products entering local markets. Much of the silvicultural work laid out in this work plan is focused on initiating seedling development to better ensure regeneration successes in future harvests. Much of the value of the harvests in the work plan will be directed back into the forest providing the essential investment in pre-harvest cultural work that will safeguard the long term sustainable management of these important forest resources.

The cultural operations and management projects outlined within the FY-19 Annual Work Plan are selected to provide significant contributions to the sustainability of forest resources found within the State Forest and the ecosystems associated with it.

III. General Location Map for FY-19 Land Management Project Proposals Approximately 536 Acres

Map Key

1. Compartment 1 Stand 2	27-acre Conifer Thinning
2. Compartment 9 Stands 0, 60, 69, 71	77-acre Hardwood Thinning
3. Compartment 9 Stands 19, 22, 56, 67	54-acre Hardwood Regeneration / 14-acre Hardwood Thinning
4. Compartment 9/10 Stands 28, 57 and 58	65-acre Hardwood Thinning
5. Compartment 10 Stand 45	28-acre Shelterwood Harvest
6. Compartment 18 Stand 12	43-acre Hardwood Thinning
7. Compartment 18 Stand 16	20-acre Herbicide Treatment of Interfering Vegetation
8. Compartment 23 Stands 68, 71-75, 88	39-acre Regeneration Harvest
9. Compartment 69 Stands 11 and 14	89-acre Herbicide Treatment of Interfering Vegetation
10. Compartment 70 Stands 23 and 24	48-acre Hardwood Thinning and Treatment of Interfering Vegetation
11. Compartment 77 Stand 13	32-acre Herbicide Treatment of Interfering Vegetation



IV. Special Projects - Forest Resource Management and Planning

A. Continued Development of the Certified State Forest Sustainable Forest Management Plan.

(This work done with special focus on addressing items identified as in need of improvement as a result of 2017 FSC/SFI Certification Audits.)

Beginning in 2011, the Forest Service began revising the long term sustainable management plans for all three of the State Forests in the Western Region. The initial framework follows the sustainable management plan format established for the State of Maryland's Chesapeake Forest on the Eastern shore. The Department's goal is to have the updated sustainable forest management plans receive dual third party certification under both the Forest Stewardship Councils (FSC) and Sustainable Forestry Initiatives (SFI) standards and guidelines.

Throughout the course of the last five years, broad resource assessments were carried out identifying the various management units and features located on the forests including identification and mapping of High Conservation Value Forest Areas (HCVF), much of which was formerly identified as the State Forests "Special Management Zone". Within the HCVF are located a broad range of Ecologically Significant Areas (ESA). These areas typically contain rare, threatened or endangered species and their critical habitats. By spring of 2011 initial drafts of the Forest's Sustainable Management Plan were developed and shared with stakeholders for initial comment and review. The plans were submitted to both the FSC and SFI organizations in the spring of 2011, at which point audits have been completed on all three of the western state forests. Following the audits, draft plans and audit findings were presented to the State Forests Citizen Advisory Committees for review and comments. The Draft Sustainable Management Plans were made available for public comment fall of 2011.

Each year the State Forests Management Program is audited for compliance to the standards set forth by the Certifying Organizations. Any shortcomings in the programs identified during the audits are identified in a Corrective Action Reports (CARs) and/or observations identified as being in need of improvement in order to be "certified" as sustainably managed forest lands under the internationally recognized FSC and SFI standards. These corrective actions vary from simple formal documentation of routine practices, to more complex policy and procedure development involving various stakeholders and partners. The program requires that all of these items be addressed before the next annual audit, with some needing more immediate attention. The 2016 audit resulted in no CARs or observations that are to be addressed by the next audit. (See Appendix 1 for brief summary of audit findings). State Forest staff time and field operations are adjusted and redirected to assist in addressing any Corrective Action items in the course of the next year.

B. Forest Stand Delineation, Inventory and Monitoring

A critical part of developing long term sustainable management plans is the availability of up-to-date forest inventory data. To this end, the State Forest's staff has been fully engaged in revising the forest stand delineation on the forests. The process continues to consume considerable staff resources as this project is taking shape. This ambitious undertaking has involved collecting detailed inventory data on both overstory and understory conditions over the entire State Forest. The data has been collected and analyzed using the SILVAH Inventory System developed by the US Forest Service.

The project involves collecting information on approximately 35,000 sample points. As the data must be collected during the growing season between hard frosts, the working window is five months. The work force of skilled technicians available generally consists of college students who can only offer three months of work before returning to school. To this end, the project is expected to take 4-6 years to complete and will cost approx. \$40,000/yr. The Assistant Forest Manager and the full time Forest Technician lead and manage this special project on top of their full work load implementing the Annual Work Plan on the forest. The stand delineation and inventory project has resulted in the shifting of the forest technician's normal duties for the equivalent of approximately six months each year to serve as crew leader for the project, provide project planning, and processing data. Staff assignments and field operations have been adjusted to assure the timely and accurate completion of this important field level assessment that will serve as the basis from which we will draw management decisions from for the next 10-15 years.

With the close of the sixth inventory season in FY-17, 100% of initial data collection has been completed on the harvestable areas of the forest. FY-19 will commit time and resources to do final processing of this data from which we continue to draw upon for management planning direction as well as completing a general inventory of the remaining High Conservation Value Forest. The demand for this important data set is increasingly evident as special projects evolving out of demands placed by Forest Certification Standards are utilizing portions of this work in progress/partial data set for project planning. Examples include the NNIS Inventory and Control Project in the ESAs of the Forest, as well as the Fiscal Year Work Plans.

What had historically been carried out on a 10-year interval offering a snap shot in time view of the forest, has evolved into an annual sampling approach that gives a more frequent look at overall forest condition throughout the years. This approach will allow a much closer watch on developing forest conditions and allows for a more rapid and timely response. This approach is especially valuable in light of the numerous and frequent introductions of foreign insects, diseases, and invasive plants that can rapidly disrupt forest systems. The initial Stand Delineation and Inventory Project will be continued as a Forest Monitoring program as required under certification in order to allow for documented observations of changing conditions throughout the forest. Program focus will include: monitoring of developing regeneration sites allowing for the timely response to the investment in intensive silvicultural work such as herbicide control of invasive and interfering plants and prescribed fire; NNIS monitoring and control work (beyond the special project area identified in this AWP below); silvicultural results with respect to management objectives and outcomes and recreation/visitor impacts, etc.

V. Maintenance and Operations

Aside from the detailed cultural work planned for the State Forests, the following is a partial list of projects that are often on-going from year to year and are an integral part of State Forest operations: Routine maintenance projects include building repair and maintenance, vehicle maintenance, mowing at the office facility, snow removal, repair and replacement of fire rings and tables at the camp sites, brush hogging trails, and repair of road surfaces.

A. Maintenance and Management of Roads and Trails

There are approximately 101 miles of trail and hardened road surface on the forest and approximately 1/3 of the mileage is maintained each year. Maintenance in these areas includes brush hogging, mowing, and rehabilitation of road surfaces. Herbicide usage has been integrated into the road maintenance regime in order to control growth in areas where mechanical control methods are not feasible (i.e. steep slopes, narrow paths, rocky areas). The use of herbicide along forest roadways can also reduce operational costs for the maintenance staff by controlling unwanted vegetation along these travel corridors for several years, when applied properly.

B. Boundary Line Maintenance

Savage River State Forest currently has 336 miles of boundary line, including interior lines, exterior lines and road frontage. Boundary maintenance is critical to the management of all public lands. In order to keep up with this effort, State Forest staff maintain approximately 60 miles of line each year. In addition to routine marking and painting, considerable effort is spent on researching, relocating, or establishing missing and/or new line, as well as addressing boundary conflicts. As conflicts arise, every effort is made to resolve the issue in a timely and professional manner. Often, this work leads to the need for a licensed surveyor and legal recourse in order to resolve the issue. With the assistance of Land Planning and Acquisition staff, a minimum of five miles of previously unpainted and/or missing boundary line are to be reestablished until the entire forest boundary is demarcated.

C. Campground Operation and Maintenance

There are 71 primitive camp sites that are maintained on a regular schedule throughout the year. Major campsite maintenance coincides with major holidays, the end of winter and at the traditional end of the camping in late summer/early fall. The campsites are also frequented during the white-tailed deer firearms seasons in the fall and winter, during spring turkey season in early spring and during the opening weekend of trout season in late winter/early spring. Maintenance and operation of these primitive campsites includes: managing group site reservations; maintenance of information / bulletin boards; camper contacts to insure policies are understood; self-registration fee collections and deposits; weekly site inspection and cleaning; hazardous tree evaluation and removals; grass mowing (typically the week before the summer holidays and otherwise as needed); maintenance and replacement of picnic tables, lantern posts, and fire rings; and site impact monitoring.

D. Rifle Range Maintenance and Management

There is a 100-yard shooting range on the forest that is open to the public year round located at 3250 New Germany Road. Maintenance is ongoing and includes replacing backstops as well as the backstop stands, trash clean-up, mowing and weed eating around the facility, plowing the entrance road, restocking range permits, collecting range fees and posting range closures when necessary. Prior to and during the various hunting seasons, range use increases appreciably resulting in more frequent maintenance visits. Typically, at the conclusion of spring turkey season, the backstops and stands from the previous year are replaced, depending on the severity of damage.

The shooting range is open daily from 8 a.m. to dusk and offers hunters an ideal location to sight in weapons. The range features ten stations with distances ranging from 25 to 100 yards. Hunters can pay the \$5.00 daily fee at the range using envelopes provided. The annual pass costing \$25 and the family pass costing \$50 are available at the Forest Headquarters Office. Rules and regulations are posted at the range, with the only restrictions being no fully automatic weapons and no clay pigeons.

VI. Recreation

A. Recreation Opportunities (See map on page 12)

1. Hiking, Biking and Horseback Riding Trails

Savage River State Forest has over 70 miles of trails open to hikers, mountain bikers and horseback riders of any ability. Not all trails are open to all recreational pursuits and it is recommended that before engaging in any activities visit or contact the state forest headquarters to become aware of any trail restrictions. A backpacking permit must be obtained at the forest headquarters or at any of the self-registration areas. Trail guides featuring a topographic map and trail descriptions can be purchased at the forest headquarters.

2. Off Road Vehicles

Snowmobile and off-road vehicle operators can enjoy many miles of scenic trail along the Meadow Mountain Trail, East Shale Road, Margraff Plantation, Negro Mountain Trail and the newly constructed St. John's Rock ORV Trail. Unlike the aforementioned trails, the St. John's Rock ORV Trail is the first trail on Department lands ever designed specifically for ORV enthusiasts. Features include a multi-site primitive campground designed to support ORV riders, children's riding trails within the campground, technical spur loops and hare scramble style trail sections for all terrain vehicles and motorcycles, a full-size rock crawl area for jeeps and four-wheel drive vehicles, and miles of forest access roads for all purpose riding opportunities. The total trail system is approximately 13 miles in length with varying challenges for riders of all skill levels.

Be sure to display a current Department of Natural Resources ORV permit, available at the forest headquarters or online at www.dnr.maryland.gov.

3. Hunting

Hunting is permitted throughout the forest except where posted with safety zone signs. The 55,000 acres of Savage River State Forest includes two state park areas (New Germany and Big Run) where hunting is prohibited. The forest boundaries are marked with yellow paint on trees a yellow bar as you enter the forest and a yellow dot as you exit the forest. Hunting on or crossing private land within or near the State Forest requires the written permission of the land owner. Parking is permitted along roadways as long as traffic is not blocked. Hunters must have a valid Maryland Hunting License and should refer to the current Hunting & Trapping guide for season dates and specific regulations.

Several access roads are opened every fall to accommodate hunters. These gated roads are opened beginning in September and remain open through January 31. A copy of the road-opening schedule is available in the Forest Headquarters Office. Opened roads can be used by all hunters and allow for vehicular traffic. Due to the nature of these roads, the use of four-wheel drive is recommended. Handicapped hunter access roads are also available. More details about handicapped accessibility appear in this brochure and on the current road-opening schedule.

Hunter Safety Classes, required for the purchase of a license, are taught periodically through the Department of Natural Resources. These classes are usually offered in the county at one of the local State Parks.

4. Trapping

Trapping is permitted both on land and in the water. A permit can be issued for trapping on Savage River State Forest at the Regional DNR Wildlife Office in Flintstone. Trappers are required to obtain a certificate of trapper education from the Department of Natural Resources. Trapper education courses are held statewide. Refer to the current Hunting & Trapping Guide for complete regulations. A valid hunting license is required when applying for a trapping permit.

5. Fishing

Anglers with a Freshwater Fishing License have the opportunity to catch multiple species of fish in the Savage River Reservoir including walleye, large-mouth bass, smallmouth bass, yellow perch, bluegill and several trout species. Anglers with a trout stamp can fish the Savage River for wild brook trout and stocked brown and rainbow trout. For regulations and creel limits consult the Maryland Freshwater Sportfishing Guide or contact the Western Maryland Fisheries Office at (301) 334-8218.

Paddling

The Savage River Reservoir provides excellent paddling opportunities. Three public boat launches offer convenient access at Dry Run Road, Big Run State Park and ¼ mile north of the dam breast on Savage River Road.

7. Winter Recreation

Cross-country skiers and snowshoers of all abilities can enjoy a winter wonderland on New Germany and Mount Aetna trails. The Asa Durst Trails are recommended for a backcountry

snowshoe experience. Snowshoers must be careful to walk beside and not on cross-country tracks as it disrupts them.

8. Geocaching

Currently, 28 goecaches are located throughout Savage River State Forest for those interested in testing their navigational and tracking skills. All geocaches must reviewed and approved by the staff before being placed anywhere on the forest. Applications and general rules for geocache placement are available at the state forest headquarters.

9. Maps

Brochures and maps are available at the Savage River State Forest Headquarters Office located at 127 Headquarters Lane, Grantsville, Maryland 21536.

